

TABLE 5.—Maximum free air wind velocities (meters per second), for different sections of the United States based on pilot balloon observations during August 1937

Section	Surface to 2,500 meters (m. s. l.)					Between 2,500 and 5,000 meters (m. s. l.)					Above 5,000 meters (m. s. l.)				
	Maximum velocity	Direction	Altitude (m) M. S. L.	Date	Station	Maximum velocity	Direction	Altitude (m) M. S. L.	Date	Station	Maximum velocity	Direction	Altitude (m) M. S. L.	Date	Station
Northeast ¹	25.0	SW	1,184	11	Newark	24.5	WSW	4,263	20	Pittsburgh	34.0	WNW	9,000	18	Albany.
East-Central ²	19.0	SSE	1,184	31	Nashville	18.0	WSW	3,340	13	Washington	32.4	NE	10,360	16	Washington.
Southeast ³	25.7	SSE	620	30	Jacksonville	20.5	SW	4,440	7	Charleston	21.5	NE	12,360	20	Charleston.
North-Central ⁴	33.2	SW	1,080	23	Fargo	26.7	W	4,568	18	Bismark	38.0	N	10,190	25	Detroit.
Central ⁵	25.6	SW	124	7	Wichita	24.8	WSW	4,445	11	Davenport	36.0	N	8,980	1	Indianapolis.
South-Central ⁶	29.8	SSE	2,020	21	Del Rio	17.2	NNE	4,270	11	Amarillo	32.0	N	18,670	24	Amarillo.
Northwest ⁷	30.6	WSW	2,133	18	Spokane	39.0	SW	4,460	22	Medford	36.0	WSW	7,533	15	Spokane.
West-Central ⁸	32.9	SW	2,500	22	Winnemucca	34.8	WSW	3,760	13	Winnemucca	42.0	SW	10,935	24	Modena.
Southwest ⁹	24.0	SSW	984	28	Las Vegas	31.1	SW	4,100	27	Havre	28.4	SW	10,200	3	Las Vegas.

¹ Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, and northern Ohio.² Delaware, Maryland, Virginia, West Virginia, southern Ohio, Kentucky, eastern Tennessee, and North Carolina.³ South Carolina, Georgia, Florida, and Alabama.⁴ Michigan, Wisconsin, Minnesota, North Dakota, and South Dakota.⁵ Indiana, Illinois, Iowa, Nebraska, Kansas, and Missouri.⁶ Mississippi, Arkansas, Louisiana, Oklahoma, Texas (except El Paso), and western Tennessee.⁷ Montana, Idaho, Washington, and Oregon.⁸ Wyoming, Colorado, Utah, northern Nevada, and northern California.⁹ Southern California, southern Nevada, Arizona, New Mexico, and extreme west Texas.

RIVERS AND FLOODS

[River and Flood Division, MERRILL BERNARD, in Charge]

By BENNETT SWENSON

During August 1937 floods occurred principally in the Susquehanna River Basin, in portions of the South Atlantic drainage area, and in the Arkansas River Basin.

Rains on August 26-27, heavy over portions of the Susquehanna watershed, resulted in local flooding in some of the tributaries of the Susquehanna River. The damage was especially heavy in the vicinity of Wellsboro, Pa., as the result of excessive rainfall over a small area between Wellsboro and Corning, N. Y. At the former place 7.39 inches were recorded between 4 and 9 a. m. of the 27th, and 6.01 inches were reported at the latter point between 9 a. m. and 10:30 p. m. of the same date. All of the small mountain streams draining into Pine Creek were within the area of the overflow. The total damage in the vicinity of Wellsboro as a result of the storm and flood has been estimated at \$645,000.

Moderate floods were in progress in the rivers of eastern North Carolina at the close of the month and full information on flood damage will be included in the next issue of the REVIEW.

Overflows in the Saluda and Santee Rivers in South Carolina during the latter part of August and the first few days of September were light and no damage of consequence occurred.

Local floods occurred in the Ninnescah and North Canadian Rivers, tributaries of the Arkansas River. The overflow in the Ninnescah River in Kansas was greatest between Kingman and Oxford and resulted in damage estimated at \$115,000 in this area. The flooding in the North Canadian River in Oklahoma was slight and no damage of consequence was reported.

Table of flood stages during August 1937

[All dates in August unless otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
ATLANTIC SLOPE DRAINAGE					
	<i>Feet</i>			<i>Feet</i>	
Tioughnoga: Whitney Point, N. Y.	12	27	27	12.2	27
James: Columbia, Va.	10	26	1 28	11.3	28
Dan: Danville, Va.	11	26	26	13.4	26
Roanoke:					
Weldon, N. C.	31	25	30	37.5	28
Scotland Neck, N. C.	23	25	(?)	28.9	30
Williamston, N. C.	10	30	(?)	10.4	31
Tar:					
Rocky Mount, N. C.	8	26	(?)	11.1	27, 29, 30
Tarboro, N. C.	18	30	(?)	21.9	Sept. 1
Greenville, N. C.	13	31	(?)	16.2	Sept. 3
Little: Kenly, N. C.	8	26	31	10.0	27
Neuse:					
Neuse, N. C.	14	25	31	18.2	26
Smithfield, N. C.	13	25	(?)	18.1	29
Goldsboro, N. C.	14	29	(?)	18.6	Sept. 3
Saluda: Pelzer, S. C.	6	13	16	7.1	14
Santee:					
Rimini, S. C.	12	July 28	1	12.5	July 30
Ferguson, S. C.	12	27	(?)	13.0	30
		29	(?)	13.4	Sept. 3
				12.9	Sept. 6
MISSISSIPPI SYSTEM					
Ohio Basin					
West Fork of White: Anderson, Ind.	8	9	16	10.5	13
		21	23	8.1	21
Arkansas Basin					
North Canadian:					
Canton, Okla.	6	22	22	6.0	22
Yukon, Okla.	8	23	25	9.1	24

¹ Fell 0.6 below flood stage on 27th.² Above flood stage at end of month.